

Amendment to the Claims:

Please amend the claims in the manner indicated.

1. (currently amended) An integrated circuit comprising: a gate array architecture;
said gate array architecture including a semiconductor substrate having a plurality of N-type diffusion regions and P-type diffusion regions; said diffusion regions having partially overlying polysilicon landing sites, at least one forming N-type and P-type transistors;

wherein the regions are relatively-sized to form two distinct transistor sizes, smaller N- and P-type transistors and larger N- and P-type transistors; and

wherein said transistors are formed in said gate array architecture so that an interconnect disposed thereon [is capable of connecting] connects said smaller transistors to form internal clock buffers.

2. (currently amended) The integrated circuit of claim 1, wherein [the] a ratio between the two distinct transistor sizes is on the order of one-third.

3. (currently amended) The integrated circuit of claim 2, wherein [the] a ratio between the capacitance of the larger and smaller relatively sized transistors is on the order of one-third.

4. (previously presented) The integrated circuit of claim 1, wherein said partially overlying polysilicon landing sites for the smaller and larger transistors are not connected.

5. (previously presented) The integrated circuit of claim 4, and further comprising an interconnect overlying said gate array architecture;

the interconnect being adapted to connect the transistors of the gate array architecture to form a flip-flop having internal clock buffers.

6. (original) The integrated circuit of claim 5, wherein the interconnect is further adapted to connect the transistors of the gate array architecture so that the internal clock buffers of the flip-flop are formed from the smaller transistors.

7. (original) The integrated circuit of claim 6, wherein said gate array architecture is repeated in said integrated circuit.

8. (original) The integrated circuit of claim 6, wherein said integrated circuit is incorporated in a communications device.

9. (original) The integrated circuit of claim 6, wherein said integrated circuit is attached to a motherboard.

10. (original) The integrated circuit of claim 9, wherein said integrated circuit is incorporated in a personal computer.

11. (original) The integrated circuit of claim 10, wherein said personal computer comprises one of a laptop and a desktop computer.

12-20. (cancelled)

21. (currently amended) An article comprising: a storage medium, said storage medium having instructions stored thereon, said instructions, when executed, resulting in [the] a capability to design [the] a layout of an integrated circuit chip for fabrication, the integrated circuit chip including a gate array architecture, the gate array architecture comprising a plurality of N-type diffusion regions and P-type diffusion regions; said diffusion regions having partially underlying polysilicon landing sites, at least one forming N-type and P-type transistors;

wherein the regions are relatively-sized to form two distinct transistor sizes, smaller N- and P-type transistors and larger N- and P-type transistors; and

wherein said transistors are formed in said gate array architecture so that an interconnect disposed thereon [is capable of connecting] connects said smaller transistors to form internal clock buffers.

22. (currently amended) The article of claim 21, wherein said instructions, when executed, result in [the] a capability to design [the] a layout of the gate array architecture, wherein [the] a ratio between the two distinct transistors sizes is on the order of one-third.

23. (previously presented) The article of claim 22, wherein said instructions, when executed, result in the capability to design the layout of the gate array architecture, wherein said partially overlying polysilicon landing sites for the smaller and larger transistors are not connected.

24. (currently amended) The article of claim 23, wherein said instructions, when executed, result in [the] a capability to design [the] a layout of an interconnect overlying said gate array architecture.

25. (currently amended) The article of claim 24, wherein said instructions, when executed, result in the capability to design the layout of [an] the interconnect overlying said gate array architecture, wherein said interconnect couples the transistors of the gate array architecture to form a flip-flop having internal clock buffers.

26. (currently amended) The article of claim 25, wherein said instructions, when executed, result in the capability to design the layout of [an] the interconnect overlying said gate array architecture that connects the transistors of the gate array architecture so that the internal clock buffers of the flip-flop are formed from the smaller transistors.

44. (previously presented) The integrated circuit of claim 1, wherein successive rows of small diffusion regions are followed by successive rows of regular-sized diffusion regions;

wherein immediately successive rows within similarly-sized diffusion regions have opposite polarity.